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MONITORING OF THE AAMA PROGRAMME:

STUDY OF IMPACT ON FACILITIES AND FACILITY FINANCING (TEN MONTHS AFTER IMPLEMENTATION)

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Support to the Safe Motherhood Programme
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Data gathering at national level was done by Sunil Khadka.

For fieldwork (data gathering at regional, zonal, district and facility level), three teams were formed, headed by Hom Nath, Sunil and Suresh from SSMP. They were accompanied by one person each with accountancy and finance training to assist with financial data gathering and checking. In some sites a person to support the data collection and interviewing process to conduct KII was also hired, depending upon the volume of information to be gathered.

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Acronyms

ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
CEOC	Comprehensive Essential Obstetric Care Facility
CS	Caesarean Section
D(P)HO	District (Public) Health Office
DDC	District Development Committee
DfID	Department for International Development
DH	District Hospital
DoHS	Department of Health Services
FCGO	Financial Comptroller General's Office
FCHV	Female Community Health Volunteer
FHD	Family Health Division
HDI	Human Development Index
HFMC	Health Facility Management Committee
HMIS	Health Management Information System
HP	Health Post
KII	Key informant interview
MoHP	Ministry of Health and Population
ND	Normal delivery
NRs	Nepali Rupees
PHCC	Primary Health Care Centres
PHN	Public Health Nurse
RH	Regional hospital
SBA	Skilled Birth Attendant
SDIP	Safe Delivery Incentive Programme
SSMP	Support to the Safe Motherhood Programme
VDC	Village Development Committee
ZH	Zonal hospital

Executive summary

The aim of this study was to understand the impact of the Aama programme on health facilities in Nepal, taking a reference period of 10 months before and after its implementation in January 2009. The information in this report can be compared with other concurrent studies of Aama, including the latest rapid assessment report by CREHPA in June 2010 and the second round of the household survey (June 2010), both of which focused largely on the household perspective.

The study tools took the form of a set of structured questionnaires to collect financial and activity data, and topic guides for discussion with key informants. 22 facilities were selected for inclusion: the main national referral hospital, one regional hospital, three zonal hospitals, six district hospitals (with two from each ecological zone), and one PHCC and HP in each of these six districts. Key informants were focused at district and facility level and included the focal person for each district; the Medical Superintendant, head nurse, HFMC chair and accountant (for each hospital) and the in-charge, the nurse, and the HFMC chair (for PHCCs and HPs).

Data was collected in December 2009 to February 2010. The main limitation faced was the incompleteness of financial records, which means that analysis of data is often partial. Despite the difficulties of collecting systematic financial data from facilities, certain conclusions can be drawn from the study.

Analysis of reported deliveries in the selected facilities confirms that there has been an increase in institutional deliveries in the public sector and other facilities included in the policy since the introduction of Aama – 19% overall, but with particular growth in district hospitals (especially those not previously benefitting from the SDIP, such as the mission hospitals). According to analysis of these facilities, complications and CS have grown in line with overall deliveries, which is reassuring, given the concerns that the policy might encourage over-medicalisation.

The financial impact of this on facilities has been examined in a number of ways. First, the study looked at the charges which had been levied before, and whether these are now fully waived. It found that while the bulk of 'core costs' (i.e. registrations, consultations, drugs and bed costs) are now officially free for deliveries, facilities do admit to continuing to charge women for some tests, supplies, food, blood and cleaning in a number of cases. This confirms the findings of the rapid assessment, which found that 43% of women had paid something for their recent delivery (and that the most common charge was for cleaning, but also sometimes for drugs and informal payments to staff). The second household survey also found that while households' payments in facilities for deliveries had fallen since the start of Aama, payments outside had not been affected. This suggests that facilities are continuing to pass on to households costs which should be covered by their reimbursement (either for financial reasons or because of poor supply systems).

The study looked at the comparison between the user fees raised before by facilities and the current reimbursement. It found that for most levels of facility and for most delivery types, facilities have gained financially from the shift: allowing for the need to fund drugs and incentivize their staff, they are still paid more than they charged patients before. The only exception to this was for the Maternity Hospital in respect of normal deliveries. However, the 'surplus' which they gain on complicated deliveries and CS should compensate for this. Moreover, being a higher level tertiary hospital, the Maternity Hospital should not be focusing on normal deliveries (though in practice they form 70% of its reported workload at present).

The results of the very small-scale costing analysis which was undertaken here also reinforce the conclusion that the reimbursement tariff does cover the direct costs and some overheads. For normal deliveries at one facility, direct costs were estimated at NRs 775-1,225, while complicated deliveries were costed at NRs 1,645 and NRs 4,857-5,207. Given the tariff of NRs 1,000-1,500 for normal deliveries, NRs 3,000 for complications and NRs 7,000 for CS, there is some margin for contributing to overhead and investment costs. This is supported by the key informant interviews – the majority were satisfied with payments, although those facilities which receive lower public subsidies or are in remote areas (with higher input costs) argued for differential payments.

Claims by facilities for reimbursement of deliveries provided appear to be made quickly, on the whole, and in full, although there are delays early in the year due to national-level delay approving the budget (and occasionally at the local level due to the absence of a key member of staff).

The Aama funds are not managed separately but go into general facility finances and are managed as part of general revenues and expenditures. As such, they are not seen as administratively too burdensome and informants appreciated the flexibility of use. However, that means that it is hard to track Aama revenues and expenditure. For the facilities where Aama expenditure was reported, 80% was used to buy drugs and 20% to pay incentives or salaries to staff. These in total amounted to 42% of the funds which should have been received (estimated from delivery numbers and the Aama tariffs). This again suggests that facilities should have surplus funds to pay for investments in care. Anecdotally, the funds have supported a range of minor recurrent costs and investments.

The overall financial balance sheet of the facilities for the periods before and after Aama gives some indication of how the policy is affecting them (clearly the policy is only one factor, but an important one, as deliveries are core business for most facilities). All facilities saw an increase in income and expenditure. At lower levels, PHCCs and HPs had positive balances which in most cases increased over the period. The district hospitals have positive balances too. However, the Maternity Hospital moved into deficit over this period.

The study also sheds light on the income and revenue structure of this selection of facilities. It is striking that there is considerable variation, even in the public sector, with some PHCCs and HPs, for example, reporting government annual grants, and others not.

Facilities were asked about savings and debts at financial year end. Most did not report either, but for those which did, ten reported savings and only one (Lumbini ZH) a debt.

The other main change of this period was the extension of the general free care policy (which has also removed revenues, in parallel with Aama, but with a different system of replacing them). Disentangling the effects of these two on facilities is not easy. While the free care policy supplies some drugs which benefit delivery services, these were reported to be generally inadequate in quantity. The subsidy is therefore limited. Meanwhile, the Aama policy is bringing in very important revenue which supports other services at the facilities. Key informants say that their facilities are struggling financially but that Aama is a help. For one facility, Aama was its only reported source of income now.

In terms of overall incentives for the facilities, the Aama programme replaces a fee for service payment system with a fixed payment per case. It therefore creates incentives to reduce length of stay and interventions – something which is also reported in the qualitative interviews (though here it is presented as a response to increased workloads and limited increases in resources such as staff).

In relation to staff, key informants reported on increased workload (technical and administrative) but also appreciated the flexibility to hire and reward staff and reported on a range of changes to services to meet the increased demand. Staff numbers (for staff working on delivery care) have either remained stable or have increased over the period. Facilities of the same kind report considerable variation in staffing numbers. Comparing reported numbers with those present when the field team visited, there is an attendance of 70% (higher at lower level facilities, on average, which presumably reflects the low overall staffing).

Staff are said to have improved morale, particularly as the Aama policy has made it easier to fund drugs and supplies and to treat people quickly and equally, without worrying about their ability to pay. In most cases, staff are appreciative of the incentive payments, though in some facilities there were concerns about how they had been distributed, and there are also concerns in remote areas about overall staffing numbers remaining low.

Most facilities were spending NRs 300 per delivery on incentives, but one (the mission hospital) was not paying any, while others were paying over the recommended amount (NRs 500 in Jumla DH and 700-800 in Sasapur HP). These monies are being distributed in various ways – sometimes just to the nurses, sometimes to a range of staff including support staff and administrators (and the HFMC), and in other cases again are not paid as incentives at all but are used to fund additional support staff positions. In most cases, staff have benefitted financially, though some (just a few) facilities reported paying staff incentives from user fees prior to the policy, in which case the benefits to their staff may be limited.

Overall, the KI recommended that the policy be continued, and called for more orientation on the financial management of the policy, clearer guidelines on the use of incentives and a range of complimentary investments to strengthen the quality of care.

Based on the findings, the authors make the following recommendations:

- There is a need for more orientation on financial management and reporting for the programme: while the monthly activity reports are well filled in, financial data is less systematic and this makes it hard to track the Aama (as well as general revenues and expenditure).
- There should be a renewed clear communication to staff and communities on what is (and is not) covered by the free delivery policy. A system of sanctions for facilities which continue to charge might be considered if the problem persists. This will only be effective however if facilities are funded for all of their services, including the wider curative care provided.
- HFMCs face considerable pressure to divert resources from Aama to staff, which are therefore not available for investment in the facility. A guideline with maximum limits for incentives (and suggestions on how to share them) should be clearly communicated to all managers and staff. Again, incentives should be conditional on not asking for informal payments from clients.
- With its fixed payment per case, the policy does introduce the risk of cost-cutting or cutting corners in care of patients – a risk which should be controlled by building in more quality of care indicators into the monitoring system.
- There is a case for offering higher payments to facilities which are based in remote areas, and therefore face higher input costs as well as lower overall utilization (and therefore reduced revenue). This should be considered when there is next a review of tariffs – just as women in the mountains receive higher transport subsidies, so too the facility payments could be varied by ecological zone.

INTRODUCTION

1 Background on the Aama Programme

The Aama programme has two components: (a) free institutional delivery care (this component was launched in mid January 2009) and (b) the Safe Delivery Incentive Programme (SDIP), a cash incentive scheme, which was initiated in July 2005. The aim of these components is to reduce the cost of delivery care to households and to increase facility deliveries in Nepal, and hence to improve the health outcomes for mothers and neonates.

This monitoring exercise focuses on the first component, the free delivery care provided through public and private not-for-profit facilities. This has been running for just over a year now, and there is a need to review its impact on health facilities and the services which they are providing.

The Aama Guidelines published by the MoHP in 2009 (Aama Programme Working Guidelines 2065-2009) specifies the services to be funded, the tariffs for reimbursement and the system for claiming and reporting on free deliveries. These guidelines have however already been subject to some revision within the first year of operation. For example, the payment to health staff per facility delivery has been revised upwards, from NRs 200 to NRs300. Similarly, for facilities, the stated rates of NRs 1,000 per normal delivery, 3,000 per complicated delivery and 5,000 per caesarean section in the guidelines has been replaced, after consultation with providers earlier in the year, with: normal delivery at health facility with fewer than 25 beds, NRs 1,000; normal delivery at health facility with 25 and more beds, NRs 1,500; complicated delivery NRs 3,000; C-Section NRs 7,000.

Despite the increase in tariffs for providers, there is concern about the impact that the Aama programme is having on facilities. That concern forms the backdrop to this monitoring exercise.

2 Objectives of the monitoring work

The overall goal of this monitoring exercise is to better understand the health economy at facility level and how it is affected by and interacting with the Aama programme.

The goals of the monitoring exercise are to:

- Examine the changes in activity since the introduction of free delivery at selected facilities
- Establish if the current reimbursements/advance for free delivery providing similar or better financial support to hospitals than the fee for service system
- Understand in more depth how facilities are managing the Aama funds and the impact that it is having on services
- Compare reimbursements with service delivery costs
- Provide recommendations on how to strengthen the Aama programme's operation in future

This monitoring component is being complemented by other tools, including an in-depth investigation of emergency obstetric care; a rapid assessment in six districts by CREHPA which will check on incentive payments made to women; a follow-up to the SDIP evaluation household survey to look at household impacts; and an add-on household survey which will be undertaken by CARE as

part of its routine monitoring of the wider free health care provision. These will all provide information which can be linked to the findings of this component.

3 Methodology

The monitoring reviewed a period of 10 months before the Aama programme was introduced (April – December 2008), compared with the 10 months after (January – September 2009).

There were four main information sources for the monitoring:

1. National data, which is already gathered centrally using Aama reporting forms, cross-checked with HMIS data – these were analysed for general trends
2. District records were also examined to track fund releases to specific facilities as part of the funding flows analysis
3. Facility recorded data (financial and for activities) were analysed, going in-depth into records for a few selected facilities of different types
4. Semi-structured interviews with health managers and managers in the districts to assess how the funds have been used in practice, constraints faced by the programme, and perceptions of impact

This will be followed by feedback of results to national level stakeholders

3.1 Key tools and indicators

Two main tools were developed: key informant interview questions, and financial monitoring forms. These are attached in Annex A.

The monitoring assessment aimed to track the following core indicators.

Changes to activities

- Trends in facility delivery numbers (normal, complicated, CS), before and after Aama, nationally and for selected facilities (N, D, F)[1]
- Trends in facility delivery coverage (normal, complicated, CS), before and after Aama, nationally and for catchment population of selected facilities (N, D, F)

Financial impacts

Revenues:

- Total revenue from deliveries, by delivery type, before and after Aama, for selected facilities (comparing user fees with current reimbursements) (F)
- Revenue from all different sources at facility level, before and after Aama (F)
- Comparing actual reimbursement from Aama with what facilities should have received (deliveries numbers x official tariffs) (N, D, F)

[1] Initials indicate level at which data for this indicator will be gathered. N= national level; D=district; F= facility.

Expenditures:

- Expenditure patterns, before and after, from whole facility perspective AND for Aama programme (F)
- Expenditure on items which should be covered by Free Health Care at district and below (3 core drugs – oxytocin, magnesium sulphate, gentamycin) (D, F)

Delays:

- Average delay in reimbursement of Aama to facilities, by facility type and area (F)
- Time taken for funds to flow from national to district and to facility level (N, D, F)
- Delays in reporting (N, D, F)

Adequacy of funds to meet needs:

- Adequacy of funds received by the selected districts and facilities, relative to claims (D, F)
- Adequacy of funds held nationally, compared with claims (N)

Overall financial impact:

- Net financial balance for selected facilities each month (revenues minus expenditure), trends before and after Aama (F)
- Comparison of reimbursement tariffs and calculation of actual costs faced by facilities of different types in providing the three categories of deliveries (F)

Impact on staff:

- Payment to health workers and other staff, comparing incentives from user fees with payments from Aama reimbursement (F)
- Trends in staffing in selected facilities, before and after (F)
- Changes to average number of deliveries per day or week per trained staff, before and after, by facility (F)

These topics were covered by the tracking forms, but also mirrored by the key informant interviews, which allowed more in-depth discussion of perceptions of impact and management of funds.

3.2 Selection of key informants

The KII were focused at district and facility levels. It was decided that that the main KI at district level would be the focal person with responsibility for the Aama.

For the hospitals, the key persons targeted were the Medical Superintendant; the head nurse; the HFMC chair; and the accountant.

In PHCC and HP, the in-charge, the nurse, and the HFMC chair were selected.

After data gathering, residual questions (e.g. on fund flows from national level) and feed-back from the field were discussed with key stakeholders at national level, in the FCGO, the MoHP, the DoHS, and the FHD.

3.3 Selection of facilities

The purpose of this exercise was not to get a nationally representative sample of facilities, but to provide an in-depth snapshot of dynamics at facility level, which nevertheless indicates some of the differences that arise at different levels of health system and in different areas. A small sample of private and mission facilities were included for comparison.

The facilities chosen included:

- At national level, the maternity hospital, as this deals with the majority of tertiary care cases
- One regional hospital
- 3 zonal hospitals, selected to represent the different regions but which also have large numbers of deliveries and are SBA training centres (Koshi in the East, Lumbini in the West and Seti in the Far West)
- 6 district hospitals, selected to provide two per ecological zone, and to include a range of regions (Jumla + Dadeldhura (mission hospital) in mountains ; Dailekh + Udaipur in hills; Nawalparasi + in Sarlahi in terai)
- For each of the 6 districts, one PHCC and one HP were selected at random for visiting. In Nawalparasi District (former NSMP District) none of the HPs we visited had delivery services; therefore we could only get data from a PHCC. The final number was therefore 6 PHCCs and 5 HPs

The list of facilities included in the final sample is shown in Table 1.

Table 1 Facilities included in the final sample

District	Health Facility		Ownership
Morang	1.	Koshi Zonal Hospital	Public
Udaypur	2.	Udaypur District Hospital	Public
	3.	Rampur HP	Public
	4.	Beltar PHC	Public
Dadeldhura	5.	Team Hospital	Mission
	6.	Jogbudha PHC	Public
	7.	Navdurga HP	Public
Sarlahi	8.	Malangawa District Hospital	Public
	9.	Lalbandi PHC	Public
	10.	Sasapur HP	Public
Kailali	11.	Seti Zonal Hospital	Public
Dailekh	12.	Tribini Health Post	Public
	13.	Dailekh District Hospital	Public
	14.	Dullu PHC	Public
Jumla	15.	Kalikakhetu PHC	Public
	16.	Depalgaun Health Post	Public
	17.	Jumla District Hospital	Public
Kaski	18.	Western Regional Hospital	Public
Rupandehi	19.	Lumbini Zonal Hospital	Public
Nawalparasi	20.	Prithivi Chandra Hospital	Public
	21.	Chormara PHC	Public
Kathmandu	22.	Maternity Hospital	Public

For the costing of services, we planned to examine the services at 10 facilities: one regional and zonal hospitals; one private medical college; two district hospitals; one mission hospital; two PHCCs and two HPs. Costs are not thought to vary hugely between facilities of the same kind, so this should be enough to examine the adequacy of current reimbursement rates.

3.4 Timeline

The planning and drafting of tools was undertaken in October 2009. Pre-testing of tools, training of data collectors and collection of national level data took place in December 2009. Data collection at zonal, regional and district levels took place in January-February 2010, followed by data entry, analysis and report writing.

3.5 Approach to KII

For the KII, a topic list was prepared as presented in the annex below. Interviewers tailored the questions to the expertise of their interviewee and used an 'open' approach, asking probing questions, responding to the comments made with further investigation, and allowing interviewees to raise important but unanticipated issues.

Questions were asked in a neutral way, so that the interviewee did not feel pressured to give a certain type of response.

The discussion was taken to the form of a conversation, not sticking rigidly to the questions. If an interviewee moved on to a related topic which was covered later in the topic list, they were allowed to speak on that and appropriate notes were made. A check was made at the end to make sure that the main points had been covered.

Each interview lasted around 1-2 hours, depending on the time available and the level of knowledge and openness of the interviewee.

Interviewers used notes to record the conversation. Initially it was thought that tape recordings should be used as a back-up, but later the idea was dropped since it was realized that on many issues related to finance people would not feel so comfortable if the conversation was recorded.

The analysis of responses has mainly followed the topic guide, but has also added other themes that have emerged from the discussions.

The write-up gives anonymity to the interviewees but has indicated where responses differed according to the type or area of the respondent.

3.6 Data analysis & reporting

Analysis has been done using Excel for quantitative data and Word and Excel for qualitative.

The indicators have been calculated using the information collected at all three levels, and has been triangulated, where possible, using multiple sources (e.g. Aama versus HMIS; district versus national level reports; claims forms versus registers etc.), as well as between quantitative and qualitative information.

3.7 Data limitations

Access to sites

Due to frequent bandhs (closures) during the period, data collection was delayed as health services, including the accounts and the finance sections, were disrupted. Some changes to sampling were also required, as described above.

Availability and knowledge of KI

Most of the key informants had been working at their facility for more than two years, covering the study period (10 months pre- and post-). In some cases, however, such as in Dailekh and Nawalparasi District Hospital, and Lumbini Zonal Hospital, some of the relevant staff were new, which limited their ability to answer questions and access records effectively.

In some cases (especially in lower level facilities) only one or two staff were available for KII, as the other staff members were out for training, or had been transferred.

In some districts, in the lower level facilities (HP, PHCC), staff members had no idea about the Aama guidelines and did not have it with them.

Availability and quality of financial data

The biggest hurdle was getting financial data, which means that the structured forms were not fully filled for any of the facilities and some of the analysis has had to be done on a partial basis, providing case studies rather than full analysis. In one facility (Dailekh), no financial data of any kind was obtained.

In most facilities, there is no separate record for Aama expenditures, since all the earnings from it are put in one basket together with other income and used for the whole facility. In addition, the free drugs and care policy was introduced around the same time as the Aama programme, so facility staff found it hard to separate their respective impacts on income and expenditure.

Another very big problem was non-standardization of names of drugs and supplies. Some facilities even used brand names as the standard name in the records. This made the comparisons between different places more difficult.

It was observed that the system of accounting and record keeping varied in different places and in the lower level facilities it was weaker, with many facilities depending on the District Health Office for all their records. In all the facilities at district level and above HMIS data were kept properly and seemed to be more institutionalised.

FINDINGS

4 Changes to activity levels

4.1 Changes to institutional deliveries (facility data)

Based on the analysis of information acquired from the records in the maternity registers in all the selected facilities, the number of deliveries has increased significantly since the start of the Aama (see Table 2). The HMIS also shows the increase, but there are some discrepancies between registers and HMIS, so we have both.

Table 2 Increase in deliveries (%), by type and level, before and after Aama,

	% increase in Normal Deliveries	% increase in Complicated Deliveries	% increase in CS	% increase in total deliveries	Facilities & notes
Central level	**20%**	**2.3%**	**19%**	**18%**	**Maternity Hospital**
Regional level	**18%**	**42%**	**-11%**	**12%**	**Western Regional**
Zonal Level	**14%**	**20%**	**30%**	**18%**	**Koshi, Lumbini and Seti ZH**
District level	**35%**	**30%**	**271%**	**37%**	**Jumla, Sarlahi, Nawalparasi, Udaypur (some facilities had no CS in both periods and other facilities had to stop during the later months of the study period due to lack of HR)**
Mission Hospital	**125%**	**185%**	**132%**	**134%**	**Team Hospital Dadeldhura**
PHCC	**11%**	**4%**	**Not Applicable**	**11%**	**6 Primary Health Care Centres**
HP level	**18%**	**Initiated by some facilities**	**Not Applicable**	**24%**	**5 different health posts, two health posts have started handling complications after SBAs have joined the facility**

Source: health facility registers

The overall increase for normal deliveries was 19%, for complications 15.5% and for CS 18%, making an overall increase of 19% in institutional deliveries. This indicates that the overall increase has been in proportion, with complicated cases and CS growing in line with normal deliveries (see Table3).

In the higher level facilities (i.e. district hospitals and above) the number of cases have shown a particular increase, ranging from 14% to 230% (comparing the 10 months before with the 10 months after). The exception is Jumla District Hospital, which had a 2 % reduction. This was due to the fact that it already offered free delivery services (including drugs and supplies) before the Aama

programme due to its low HDI district status. This was similar for Dullu PHCC in Dailekh District. In Jumla district the other two lower level facilities (HP and PHCC) show huge increases in normal deliveries since the delivery service in those facilities were started just two or three months before Aama was launched (see Table 3).

The number of CS had gone up in all the facilities, except for Western Regional Hospital where it had reduced. The service providers in Pokhara informed us that, due to the Aama programme, they do not have to worry about the payment of bills by the clients so they are using longer observation and trial times to reduce the CS cases. They now did not have to worry about the length of stay and the cost of drugs and supplies.

In the national Maternity Hospital, the CS numbers have increased with the increasing number of institutional deliveries and seem to be in proportion with normal deliveries. However, the number of complicated cases has not changed much, with just a 2% increase after Aama. It is not clear why this is the case.

In Koshi Zonal, the number of complicated deliveries and caesareans had increased but in proportion to the total institutional delivery had decreased. According to staff, this was due to the presence of SBAs in peripheral facilities.

It was observed in Lumbini Zonal Hospital that CS cases had gone up by almost 55%. Due to increased caseload Lumbini Zonal Hospital had been referring CS cases to Amda Hospital (an NGO hospital). During the 10 months period after Aama 37 cases were referred to Amda. Due to this, 37 eligible mothers who came to the government hospital have been deprived of the free care and incentive facility announced by the Government. In comparison to before Aama, normal and complicated delivery cases had gone down in Lumbini Zonal Hospital.

It was found that in all the public District Hospitals - Nawalparasi (Prithivi Chand), Jumla, Dailekh, Sarlahi (Malangawa) and Udaypur - no CS service was available, mainly due to lack of qualified HR. In case of Nawalparasi even complications were being referred to the Zonal Hospital at Butwal. There are large variations in the number of CS cases in Nawalparasi due to the absence of qualified HR for six months before and four months after Aama.

In case of the Mission Hospital at Dadeldhura (Team Hospital), the numbers of women coming to the hospital were falling prior to Aama, as the transport incentive was only offered at the Government Hospital. Now, after the introduction of free maternity in the hospital, the number of delivery cases has increased by 134% overall.

In general in the lower facilities the increase in institutional deliveries was 11% at PHCC level and 24% at HP level, though in the case of a few facilities the number has increased more dramatically. This is mainly due to establishment of services just couple of months before the Aama programme or after it in those lower level facilities. With the increasing number of SBAs and the Aama programme it has been observed that birthing facilities are expanding and HFMC are promoting the establishment of Birthing Centres in their facilities. Since the Aama programme was introduced, some of the PHCCs have also started handling complicated cases, using trained SBAs.

Slightly different is the case of Chormara PHCC in Nawalparasi and Rampur HP in Udaipur District. In these two facilities the cases have decreased mainly because in Rampur other birthing centers have been established around the periphery, and in Nawalparasi since Aama was implemented in nearby and easily accessible Dumkauli PHCC and Lumbini Zonal Hospital. This shows that establishing

peripheral services can reduce loads to higher level facilities. This was also reported from Jogbudha PHCC in Dadeldhura District.

In low-HDI districts like Dailekh and Jumla there is not much difference in the number of deliveries since the introduction of Aama. In these districts all the services were free before, including drugs in the lower level facilities (HP and PHCCs).

The staff members of Jumla District Hospital and the peripheral facilities had the view that the institutional delivery rate could go up significantly if literacy programmes or awareness programmes were conducted in the villages, and also if the accessibility (road networks and transportation) was improved. In low-HDI districts like Dailekh where awareness raising programmes were implemented, more women were visiting due to more sensitization efforts through local government and the NGOs. In Jumla it is reported that the institutional delivery has increased since the removal of the previous restriction of incentives to only those with up to two children.

In Jumla, in Kalikakhetu PHCC, they were providing NRs. 100 to the FCHV for each case they brought for institutional delivery. The NRs 100 came out the 1,000 being provided to the facility at present for each institutional delivery. Due to this and the new services provided, a very substantial increase in institutional deliveries has been observed.

Table 3 Deliveries before and after Aama, by facility

Table 3 Deliveries before and after Aama, by facility

Facility Name	10 Months before Aama			10 Months after Aama			Increase (after compared with before)								Remarks
	Normal	Complication	CS	Normal	Complication	CS	Normal	%	Complications	%	CS	%	TOTAL	%	
Maternity Hospital	11,011	1,946	2,497	13,262	1,991	2,974	2,251	20	45	2.3	477	19.1	2,773	18	
Western RH	4,380	311	1,386	5,148	441	1,228	768	18	130	41.8	- 158	-11.4	740	12	
Koshi Zonal Hospital	3,280	494	1,398	4,438	645	1,603	1,158	35	151	30.6	205	14.7	1,514	29	
Seti ZH	1,960	187	200	2,276	233	282	316	16	46	24.6	82	41.0	444	19	
Lumbini ZH	3,547	293	738	3,339	290	1,143	- 208	-6	- 3	-1.0	405	54.9	194	4	
Udaypur District Hospital	507	17	-	580	32	-	73	14	15	88.2	-		88	17	No C.S due to lack of Doctor
Sarlahi District Hospital (Malangawa)	276	6	-	499	10	-	223	81	4	66.7	-		227	80	
Team Hospital	265	48	47	595	137	109	330	125	89	185.4	62	131.9	481	134	
Dailekh DH							-		-		-		-		Data not obtained by the visiting team
Jumla DH	259	62	1	275	53	-	16	6	- 9	-14.5	- 1	-100.0	6	2	
Nawalparasi District Hospital (Prithivi Chand)	328	29	13	502	53	52	174	53	24	82.8	39	300.0	237	64	Doctor was transferred just 3 months earlier, 1 CS was done last month doctor was called in for that.
Rampur HP	242	-	-	157	-	-	- 85	-35	-		-		- 85	- 35	No delivery service for the last four months of the later survey period. When calculated on average the rate of delivery is higher afterAama
Navdurga HP	112	-	-	173	20	-	61	54	20		-		81	72	Complication started after Aama 20 cases during the period
Sasapur HP	5	-	-	32	-	-	27	540	-		-		27	540	
Tribini HP	47	-	-	85	-	-	38	81	-		-		38	81	
Depalgaun HP	23	-	-	60	3	3	37	161	3		3		43	187	Complication started after Aama 3 cases during the period
Jogbudha PHCC	207	-	-	238	1	-	31	15	1		-		32	15	Complication started after Aama 1 cases during the period
Lalbandi PHCC	184	-	-	193	-	-	9	5	-		-		9	5	women not much aware about the scheme
Dullu PHCC	202	12	-	182	13	-	- 20	-10	1	8.3	-		- 19	- 9	more
Kalikakhetu PHCC	2	-	-	40	-	-	38	1900	-		-		38	1,900	Delivery service started just two months before Aama was initiated
Katari PHCC	113	-	-	185	-	-	72	64	-		-		72	64	
Chormara PHCC	270	11	-	244	23	-	- 26	-10	-	0.0	-		- 26	- 9	
TOTAL	**27,220**	**3,416**	**6,280**	**32,503**	**3,945**	**7,394**	**5,283**	**19**	**517**	**15.1**	**1,114**	**17.7**	**6,914**	**19**	

4.2 Changes in delivery numbers (HMIS data)

The national HMIS data was examined for changes in institutional deliveries (see Table 4). Data for the 10 months before Aama and 10 months after are analysed. The results show a modest increase in normal deliveries and a very substantial increase in complications in particular. However, these data are believed to be incomplete, lacking national and sometimes zonal and regional information.

Table 4 Changes in activities (HMIS data, national), before and after Aama

Period	Normal deliveries	Complications	CS
Chaitra To Ashad, 2064/65	51960	966	4221
Shrawan To Poush, 2065/66	80077	4676	7676
Total 10 months before	132,037	5,642	11,897
Magh To Ashad, 2065/66	93475	8774	11963
Shrawan To Kartik, 2066/67	43290	3777	3962
Total 10 months after	136,765	12,551	15,925
Increase	3.6%	122.5%	33.9%

Source: HMIS data, Safe Motherhood, 2064-2067, Department of Health Service, Management Division

5 Financial impact

5.1 Delivery charges at facilities prior to Aama

Table 5 presents the information collected prior to the Aama programme by the selected facilities for deliveries of various types. This information is relevant as these are the revenues which are in most cases now foregone by facilities and have to be compensated through the Aama reimbursements.

Registration/admission charge

Registration charges ranged from NRs 0 to NRs. 50, depending upon the facility. In low HDI districts it was free for all the facilities below PHCC and in some cases even the district hospitals were not charging. Some facilities continue to charge registration for ANC however, and to charge women who come in with labour pains but without delivering (e.g. the Maternity Hospital).

Bed-charges

Previously, 12 out of 22 facilities charged patients a fixed amount per bed-day. These ranged from 0-80 NRs per day.

Deposits

Four of the facilities (all hospitals) had previously required deposits from women, ranging from NRs 100 to 1,000.

Table 5 Charges for delivery prior to Aama, by facility

Facility Name	Level of Service at Present	Registration	Bed Charge/Night	Bed cost according to case			Cost of Drugs and Supplies Earlier	Charge for deliveries			Lab Testing and other invetigations								Revenues by type of delivery per case (pre-Aama)			Remarks
				Normal (1night)	Complicated (3 nights)	CS (4 nights)		Normal	Complicated	CS	USG	blood grouping	TCDC	HIV	Pregnancy Test	HB%	Urine R/E	Cross Matching	Normal	Complicated	CS	
National																						
Maternity Hospital	ND, Complication and CS		80	80	240	320	self	700	700	1225	450	50	40	150	80	20	15	80	780	1825	2430	
Regional																						
Western RH	ND, Complication	10	35	35	105	140	self	350	500	1000	350	25	125	230	50	15	25	25	445	1460	1995	
Zonal hospitals																						
Koshi Zonal Hospital	ND, Complication	30	25	25	75	100	self	400	400	1000	600	40	30	325	150	15	15		605	1680	2305	
Lumbini ZH	ND, Complication	50	25	25	75	100	self	500	500	1000	350	45	45	45	45	45	45	45	620	1290	1875	
Seti ZH	ND, Complication and CS	10	50	50	150	200	self	250	1500	3000	350	50	100	150	100		30		410	2440	3990	for complication manged by vacuum and forcep 500 charged instead of 1500
Zonal average		30	33	33	100	133	-	383	800	1,667	433	45	58	173	98	20	30	45	545	1,803	2,703	
District hospital																						
Team Hospital	ND, Complication	30	40	40	120	160	self	830	1500	5000	250	50	80	180	100	50	70	700	1000	3130	6670	
Sarlahi District Hospital (Malangawa)	ND, Complication	50	20	20	60	80	self	200	250	referred	450	50	40	150	80	20	15	80	350	1245	0	
Nawalparasi District Hospital (Prithivi Chand)	At present only ND and Complication	0	40	40	120	160	self	250	500	1000		40	40		70	20	15	60	360	865	0	Only charges for delivery
Udaypur District Hospital	ND and Complication (limited)	10	10	10	30	40	self	250	500	referred									270	540	0	for complicated 350 and for vaccum and forcep 500 charged so higher value has been taken
Dailekh DH	Normally ND and Complication only but now CS	10	0	0	0	0	self	250	1500	2000									260	1510	0	500 for forcep delivery and vaccum
Jumla DH	ND and Complication	0	20	20	60	80	self	500	500	referred									520	560	0	
DH average		17	22	22	65	87	-	380	792	2,667	350	47	53	165	83	30	33	280	460	1,308	1,112	
PHCCs																						
Chormara PHC	ND and Complication	5	25	25	75	100	self	250	250	referred									280	330	0	Rs. 5 before 1 PM and after 1 PM Rs. 25
Beltar PHCC	ND and	5	0	0	0	0	self	150	150	referred		20	40		50	20	20		150	305	0	
Jogbudha PHCC	ND and	5	0	0	0	0	self	200	200	referred		30	10	100	70	15	10		205	440	0	
Lalbandi PHC	ND	10	0	0	0	0	self	400	referred	referred		25	15		50		20		410	0	0	
Kalikakhetu PHC	ND	0	0	0	0	0	self	0	0	referred									0	0	0	Earlier also free due to low HDI
Dullu PHC	ND	0	0	0	0	0	self	0	referred	referred									0	0	0	Earlier also free due to low HDI
PHCC average		4	4	4	13	17	-	167	100	-	-	25	22	100	57	18	25	-	261	358	-	
Navdurga HP	ND	5	0	0	0	0	self	250	referred	referred									255	0	0	
Sasapur HP	ND	5	0	0	0	0	self	0	referred	referred									5	0	0	
Rampur HP	ND	2	0	0	0	0	self	0	referred	referred									0	0	0	
Tribini HP	ND	0	0	0	0	0	self	0	referred	referred									0	0	0	Earlier also free due to low HDI
Depalgaun HP	ND	0	0	0	0	0	self	0	referred	referred									0	0	0	Earlier also free due to low HDI
HP average		2	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	52	-	-	

Fixed charges for ND, complications, CS

Data was collected on the service charges previously levied, which showed considerable variation within facility types and across categories. For normal deliveries at DH, for example, charges varied from NRs 200 to 830.

Medicines and supplies

In all cases, women and their families previously paid for drugs, usually bringing them from outside from drug shops, although sometimes purchasing them from the facilities.

Tests

Tests were charged according to need. The tariff is presented in Table 5.

5.2 The package of care which is covered now

Key informants were asked what package of care is provided for free under the Aama programme. Most respondents said that the whole range of safe motherhood activities (ANC, deliveries, PNC) were covered. Some, however, said that the package had not been clearly specified and that they needed guidelines from the district. Udaypur DH reported that MVA is not reimbursed, though they do provide this for free.

The following services were noted as charged:

- Western RH provides free deliveries but charges for ANC, registration, post abortion care and PNC (if there are complications)
- Chormara PHC provides free iron but charges for folic acid and calcium at ANC visits
- The Maternity Hospital charges for ANC and for investigations

When asked about specific cost components associated with deliveries, all confirmed that the following costs are now waived: registration costs, consultations, drugs, and bed costs.

For transport, 14 out of 22 facilities reported that women do pay, but receive funds to cover transport costs. Rampur HP reported that it had set up a revolving fund to support poor women to go to higher facilities for CS or complications – this suggests that transport for referrals is still a barrier for some.

Four facilities reported that women pay for tests (Seti ZH, Pokhara RH, Chormara PHC, and Navdurga HP), while all others said not. Lab tests cost NRs 200 at Seti ZH.

Three reported that women paid for some supplies (Jumla DH, Seti ZH and Pokhara RH), while all others were negative. Reported costs ranged from NRs 200-350.

Koshi ZH reported that clients are still paying for the medicine cost of RH negative, the cost of neonatal problems and for CAC (NRs 1,000) and MVA (NRs 650).

For food costs, 7 out of 22 reported that women or their families have to provide food.

Six facilities reported charging for blood transfusion: Seti DH, Dailekh DH, Jumla DH, Pokhara RH, Maternity Hospital and Privithi Chandra Hospital. Cost varied from NRs 600-1,000 per pint.

5.3 Comparing user fees (before) with Aaama reimbursements

Table 6 Comparing Aama reimbursements with previous fees for deliveries (NRs)

	Normal deliveries	Complications	Caesareans
National			
User payments per delivery	780	1,825	2,430
Cost of total drugs and suppl	557	660	2,288
Incentive payment to staff	300	300	300
Payments from Aama	1,500	3,000	7,000
Surplus'	- 137	215	1,982
RH			
User payments before	445	1,460	1,995
Cost of total drugs and suppl	570	660	2,144
Incentive payment to staff	300	300	300
Payments from Aama	1,500	3,000	7,000
Surplus'	185	580	2,561
Zonal			
User payments before	545	1,803	2,703
Cost of total drugs and suppl	488	660	1,985
Incentive payment to staff	300	300	300
Payments from Aama	1,500	3,000	7,000
Surplus'	167	237	2,012
District			
User payments before	460	1,308	1,112
Cost of total drugs and suppl	413	660	1,944
Incentive payment to staff	300	300	300
Payments from Aama	1,500	3,000	7,000
Surplus'	327	732	3,644
PHCC			
User payments before	261		
Cost of total drugs and suppl	317		
Incentive payment to staff	300		
Payments from Aama	1,000		
Surplus'	122		
HP			
User payments before	255		
Cost of total drugs and suppl	220		
Incentive payment to staff	300		
Payments from Aama	1,000		
Surplus'	225		

Prior to the Aama programme, facilities levied charges according to the number of nights' stay and also a fixed charge for deliveries of different types. These covered the cost of tests, but supplies and drugs were paid separately by patients. Since the introduction of the Aama, facilities receive a lump

sum which also has to cover the cost of drugs and supplies. In Table 6, we examine if there is any 'surplus' left over, if we compare the reimbursement with previous fees[2], to which the average cost of drugs for that delivery type and level is added, together with the incentive payment to staff, which is assumed to be NRs 300 per case. The drug costs and amounts are based on interviews and prescriptions examined at each facility (averaged across facilities of the same level).

The table shows that most facilities have benefited financially from Aaama, looking purely at the impact on revenue per case. This also allows for the incentive payment, which has knock-on positive effects for staff motivation, as documented by the qualitative analysis. There is a 'surplus' for most categories. The only facility losing out, according to these figures, is the Maternity Hospital under current payment for normal deliveries. However, the surpluses generated by the more complex procedures should more than compensate.

5.4 Comparing costs with reimbursement tariffs

The tracking forms collected evidence on the direct costs of providing normal deliveries, complicated deliveries and caesarean sections at different facilities. The direct costs from one facility (Team Hospital) are presented in Table 7.

The costing exercise took the facility perspective and so should reflect any costs actually incurred by the facilities themselves. In practice, this is made more complicated by the fact that many receive a government grant to cover overhead costs (while others do not); many receive equipments free via the DHO; and salaries of key staff are paid at most government hospitals. Allocating overhead costs was also made more difficult by the failure to collect general utilization data from the facilities to weight the proportion attributable to deliveries.

For this reason, only the direct costs are presented below (including the staff incentive payment and some minor overheads such as cleaning). As many of the other costs are not borne by the facilities, these give a reasonably accurate picture.

[2] Fees are calculated using the average inputs per case for test, plus the charge per night, at an average of 1 night for normal deliveries, 3 for complications and 4 for caesareans. For the Aama replayment schedule, the assumption is made that DH have more than 25 beds.

Table 7 Direct costs of deliveries (data from Team Hospital)

Normal delivery - direct costs	**Unit**	**Rate**	**Amount**		**CS - direct costs**	**Unit**	**Rate**	**Amount**
Gloves	2 pair	25	50		CS Set/CSD Charge	1	100	100
Ferrous Sulphate	60tab	1.5	90		Folies catheter + uro bag	1	130	130
Folic Asid	60 tab	1	60		Oxygen	4	50	200
Vitamin K	1 amp	15	15		Spinal Anaesthesia with needle	1	200	200
Oxitocin	2 amp	30	60		Gloves	8	25	200
VitaminA	1 Cap	Free			Suture	5	350	1750
Cord Clamp		5	5		Ocytocin	20 unit	6	120
Amoxycilin	30	8	240		Ampicillien Inj	1	30	30
Paracetamol	10	0.5	5		Ampicillien	28	8	224
Baby Blanket	1	100	100		Diclojenac	3	10	30
Staff incentives	fixed		50		Diclojenac	21	3	63
Stationary/others			100		Vitamin K	1 amp	15	15
If a suture is needed:					Cord Clamp		5	5
Catherization		50	50		Baby Blanket	1	100	100
Suture	2	200	400		Ferrous Sulphate	60tab	1.5	90
Average without suture			**775**		Folic Asid	60 tab	1	60
Average with suture			**1,225**		IV Fluid	15	735	735
					Ward Stay	5	40	200
Complicated delivery - direct costs	**Unit**	**Rate**	**Amount**		Betadine	60ml	30	30
Vacum delevery set/CSD	1	100	100		Gauze pices	15	5	75
Amoxycilin	30	8	240		Staff incentive	Fixed		300
Ferrous Sulphate	60tab	1.5	90		Stationary			100
Folic Asid	60 tab	1	60		Cleaner	2 hrs	50	100
Suture	2	200	400		*If blood is needed:*			
Vitamin K	1 amp	15	15		Blood	1	350	350
Oxitocin	2 amp	30	60		Average total (w/out blood)			4,857
VitaminA	1 Cap	Free			Average total (with blood)			5,207
Ward Stay	3	40	120					
Cord Clamp		5	5					
Baby Blanket	1	100	100					
Catherization		50	50					
Paracetamol	10	0.5	5					
Staff incentive			300					
Stationary			100					
Average total			**1,645**					

The direct costs of a normal delivery, according to these figures, will range from NRs 775-1,225, depending on whether a suture is needed. This accords fairly closely with the current tariff of NRs 1,000-1,500. For complicated deliveries, the direct costs of NRs 1,645 leave quite a margin within the NRs 3,000 tariff to contribute to overhead costs. For CS, the average of 4,857-5,207 again suggests that institutions will be able to cover some overhead or investment costs from the Aama payments.

5.5 Qualitative findings on adequacy of Aama tariffs

The KI reports suggest that the Aama reimbursements are adequate to cover the direct costs of delivery procedures. Most normal delivery costs (drugs and supplies) are estimated at up to NRs 500; together with the staff incentive payments, that comes to NRs 800, leaving some small margin for savings or other investments.

*'Yes, the amount for Aama programme is sufficient to cover delivery cost. We have little bit saving from that' (*Koshi ZH)

'According to new system, we have separate record of Aama programme. This year we have estimated to get 1 crore amount and expenditure will around 60 lakh' (Koshi ZH)

'This programme is one of the best programmes contributing to enhance financial system of this hospital….We are making good saving from programme - about 10 to 15 lakhs per year' (Seti DH)

For facilities which do not receive other forms of public support (e.g. Team Hospital, which is a community one), more funds are needed to cover salaries and maintenance costs. Some KI also comment on the need to fill the wider financing gap left by free care.

Only two facilities reported that funds were not adequate: Lumbini ZH and Sasapur HP. In the latter case, the inadequacy was related to spending NRs 700-800 on incentives per delivery.

There was some resentment by Jumla staff regarding the fee reimbursement structure: they had the view that in places like Jumla, where everything including drugs and supplies are expensive due to high transportation costs, the reimbursement structure should be higher than in more accessible districts.

5.6 Comparing reimbursements with amounts claimed

The quantitative forms indicate that claims are settled within the month, in most cases, and that amount reimbursed correlate with claims. However, the claims do not match the number of deliveries recorded (multiplied by the appropriate tariff). This may reflect the accounting systems, which bundle Aama claims with other items (e.g. free care).

Asked about whether they had received the amounts claimed in full from the Aama programme, KI reported positively (apart from Belpar HP, which had not managed to submit fund requests yet).

'Normally total amount is always same as the tariffs…. But sometime we received money for 4-6 month together' (Lalbandi PHC)

5.7 Comparing facility Aama income with expenditure

Very few of the facilities reported on how they had spent the money from the Aama programme (in many cases the Aama expenditures are merged with other items). Where they did report, it is clear that the two main items of expenditure are drugs and staff, with the former dominating (around 80% of Aama expenditure, with staff absorbing around 20%).

Overall, reported expenditure on Aama (in those facilities where figures were available) is 42% of the Aama income which facilities should be deriving (looking at reported deliveries and the official tariffs – actual Aama income accounts were missing in most cases) (see Table 8). This indicates that the facilities are not out of pocket from the programme, if the reported figures are accurate.

Table 8 Facility-based income and expenditure on Aama (selected facilities), 2009

Koshi ZH	
Aama income (calculated from tariffs)	19,813,000
Aama expenditure	
Drugs	7,173,000
Doctors	161030
Nursing staff	1055360
Paramedics	12274
Administrative Staff	200193.79
Supporting staff	81980
Total expenditure	8,683,838
Balance	11,129,162

Udaypur DH	
Aama income (calculated from tariffs)	966,000
Aama expenditure	
Drugs	216,167
Staff nurse	23,700
ANM	70,200
Total expenditure	310,067
Balance	655,933

Lalibandi PHC	
Aama income (calculated from tariffs)	1,036,200
Aama expenditure	
Drugs	94,459
Staff nurse	4,850
ANM	22,730
HA	10,860
AHW	13,120
Support staff	7,130
Total expenditure	146,019
Balance	890,181

Rampur HP	
Aama income (calculated from tariffs)	157,000
Aama expenditure	
Drugs	57,495
Staff (one employee)	50,000
Total expenditure	107,495
Balance	49,505

Navdurga HP	
Aama income (calculated from tariffs)	233,000
Aama expenditure	
Drugs	59,700
Staff (one employee)	22,400
Total expenditure	82,100
Balance	150,900

5.8 Evidence on delays in receiving reimbursements

Most facilities reported a smooth local payment system, taking between one and 15 days to settle claims. This is supported by the monitoring forms.

A number of KI complain of delays in receiving funds, though in some cases they appear to be thinking more of the SDIP than the Aama programme itself. In most cases funds do seem to have arrived eventually (but not in all cases). In one case (Udaypur DH), they claimed not to have received any Aama funds yet. In general, however, the delay is experienced in the early months of the fiscal year, largely due to delays in central budget approval, according to KI.

'Delay in fund release from centre is the main fund management problem' (Dailekh DH)

'Not released on time, since shrawan 66 no budget released by DHO and using from HFMC money' (Chormara PHC)

'We received fund for Aama this year only in Mangsir after 5 month of FY started' (Sasapur HP)

In terms of identifying the causes of delays in fund releases, KI either identified national level issues or some very localized ones (e.g. the doctor or accountant being away).

5.9 Overall financial situation of facilities – income, expenditure and balances

Facility data on overall income and expenditure was collected in order to look at the financial 'health' of facilities and how that might have changed over the period of the introduction of Aama. Facilities were also asked about savings and debts.

Looking at reports from the Maternity Hospital, it is clear that government remains the major source of revenue, and that both income and expenditures have increased, but that in the past two years, the hospital has moved into a deficit situation (see Table 9). This imbalance applies only to the Maternity Hospital and Seti Zonal hospitals (though data from the latter precedes Aama) – all others have maintained a positive balance over the period.

Table 9 Facility income and expenditure, Maternity Hospital and Seti ZH, 2007-9

Maternity Hospital	2007(2063/4)	2008 (2064/5)	2009 (2065/6)		Seti ZH	2007(2063/4)	2008 (2064/5)
INCOME					INCOME		
Annual grant from government	61,328,060	74,300,000	123,000,000		Annual grant from government	6,779,608	6,902,778
Total user fees (all services)	47,463,683	53,767,936	52,513,465		Total user fees (all services)		
Donations	-				Donations		
Training fees	-	2,940,134	2,616,980		Training fees		
Rent of properties	8,545,613	8,883,534	5,272,363		Rent of properties	1,252,058	1,660,640
Any other income	1,043,063	818,048	1,265,367		Any other income	977,617	868,101
Total	118,380,419	140,709,652	184,668,175		Total	9,009,283	9,431,519
Increase in revenue	n/a	19%	31%		Increase in revenue	n/a	5%
EXPENDITURE					EXPENDITURE		
Salaries paid by facility	62,385,599	77,718,380	99,687,766		Salaries paid by facility	4,762,097	7,820,578
Maintenance/Electricity	6,262,850	6,631,390	7,255,739		Maintenance		
Drugs and supplies			26,457,737		Drugs and supplies		
Capital expenditure		24,139,879	41,917,336		Utilities		
Other consumables	6,472,397	17,702,683	5,749,389		Other consumables		
Any other expenditures?		14,890,973	42,669,469		Any other expenditures?	4,570,157	3,901,409
Total expenditure for facility	75,120,846	141,083,305	223,737,436		Total expenditure for facility	9,332,254	11,721,987
Increase in expenditure	n/a	88%	59%		Increase in expenditure	n/a	26%
Income minus expenditure	43,259,573	(373,653)	(39,069,261)		Income minus expenditure	(322,971)	(2,290,468)

At district hospital level, we have data for Udaypur and Team (mission) hospital. Clearly the financial structure is different for the mission hospital, as it does not receive a government grant. While both

facilities have seen large increases in income and expenditure, they maintain a positive balance (though reduced positive balance, in the case of Team Hospital).

Table 10 Facility income and expenditure, Udaypur and Team DH, 2007-9

Udaypur DH	2008 (2064/5)	2009 (2065/6)		Team Hospital (mission)	2008 (2064/5)	2009 (2065/6)
INCOME				INCOME		
Annual grant from government	3,467,800	5,397,564		Annual grant from government	NA	NA
Total user fees (all services)	1,322,894	1,601,105		Total user fees (all services)	5,194,730	15,858,543
Donations	-	-		Donations	2,506,777	3,249,812
Training fees	-	-		Training fees	-	-
Rent of properties	-			Rent of properties	29,030	348,564
Any other income	610,692	1,307,965		Any other income		
Total	5,401,385	8,306,634		Total	7,730,537	19,456,919
Increase in revenue	n/a	54%		Increase in revenue	n/a	152%
EXPENDITURE				EXPENDITURE		
Salaries paid by facility	2,901,876	4,786,888		Salaries paid by facility	2,480,864	8,300,865
Maintenance	61,500	20,831		Maintenance	51,806	163,663
Drugs and supplies	487,192	329,123		Drugs and supplies	1,798,446	7,086,767
Utilities	1,263,398	1,122,234		Utilities	-	-
Other consumables		97,228		Other consumables	546,740	2,624,177
Any other expenditures?				Any other expenditures?		
Total expenditure for facility	4,713,966	6,356,305		Total expenditure for facility	4,877,856	18,175,472
Increase in expenditure	n/a	35%		Increase in expenditure	n/a	273%
Income minus expenditure	687,419	1,950,329		Income minus expenditure	2,852,681	1,281,447

The reporting PHCs, on the other hand, have an increasing positive balance over the past two years (see Table 11). It is also striking that while some PHCs receive annual government grants, others do not. Chormara, Beltar and Dullu do not record any grant from government, whereas Jogbudha does (for 2009 alone) and Lalibandi records one for 2008 and 2009. (For Kalikakhetu there are no records.) Dullu PHC states that their only source of revenue is the Aama programme.

Table 11 Facility income and expenditure at PHC level, 2008-9

Jogbudha PHC	2008 (2064/5)	2009 (2065/6)
INCOME		
Annual grant from government	-	275,000
Total user fees (all services)	132,530	40,446
Donations	36,000	-
Training fees		
Rent of properties		
Any other income		
Total	168,530	315,446
Increase in revenue	n/a	87%
EXPENDITURE		
Salaries paid by facility	36,000	43,786
Maintenance	8,250	13,942
Drugs and supplies	8,660	62,871
Utilities	28,255	5,285
Other consumables	30,518	57,623
Any other expenditures?		
Total expenditure for facility	111,683	183,507
Increase in expenditure	n/a	64%
Income minus expenditure	56,847	131,939

Beltar PHC	2008 (2064/5)	2009 (2065/6)
INCOME		
Annual grant from government		
Total user fees (all services)	206,083	345,622
Donations	-	
Training fees	-	
Rent of properties	-	
Any other income	206,083	345,622
Total	412,166	691,244
Increase in revenue	n/a	68%
EXPENDITURE		
Salaries paid by facility	38,600	74,800
Maintenance	-	-
Drugs and supplies	22,538	43,321
Utilities	-	24,544
Other consumables	-	-
Any other expenditures?	104,410	214,300
Total expenditure for facility	165,548	356,965
Increase in expenditure	n/a	116%
Income minus expenditure	246,618	334,279

Lalibandi PHC	2008 (2064/5)	2009 (2065/6)
INCOME		
Annual grant from government	55,057	310,597
Total user fees (all services)	317,676	237,314
Donations	-	-
Training fees		
Rent of properties		
Any other income		
Total	372,733	547,911
Increase in revenue	n/a	47%
EXPENDITURE		
Salaries paid by facility	213,108	272,430
Maintenance	2,280	21,896
Drugs and supplies	39,935	42,168
Utilities	69,643	52,626
Other consumables		
Any other expenditures?		
Total expenditure for facility	324,966	389,120
Increase in expenditure	n/a	20%
Income minus expenditure	47,767	158,791

At health post level, balances are also positive (for those few HPs where full records were available). Again, there is variation in support from government, with Rampur receiving no grant, unlike Navdurga (see Table 12).

Table 12 Facility income and expenditure, two health posts, 2008-9

Rampur HP	2008 (2064/5)	2009 (2065/6)		Navdurga HP	2008 (2064/5)	2009 (2065/6)
INCOME				INCOME		
Annual grant from government	NA	NA		Annual grant from government	9,130	217,215
Total user fees (all services)	184,185	192,723		Total user fees (all services)	48,376	28,965
Donations	65,000	60,000		Donations		180,000
Training fees	-	-		Training fees		
Rent of properties	-	10,000		Rent of properties		20,140
Any other income	119,185	122,723		Any other income	8,412	111,011
Total	368,370	385,446		Total	65,918	557,331
Increase in revenue	n/a	5%		Increase in revenue	n/a	745%
EXPENDITURE				EXPENDITURE		
Salaries paid by facility	72,000	60,000		Salaries paid by facility		200236
Maintenance				Maintenance		49426
Drugs and supplies		57,495		Drugs and supplies	33180	47051
Utilities				Utilities		62704
Other consumables				Other consumables		1200
Any other expenditures?	33,421	69,519		Any other expenditures?	16767.77	8526
Total expenditure for facility	105,421	187,014		Total expenditure for facility	49,947.8	369,143.0
Increase in expenditure	n/a	77%		Increase in expenditure	n/a	639%
Income minus expenditure	262,949	198,432		Income minus expenditure	15,970	188,188

Health facilities were asked whether they had savings or debts at the end of the financial year. Many did not provide information on these (which may indicate absence of savings/debts or absence of information). For those which did report, the bulk had accrued some savings, which is a positive indicator. Only Lumbini ZH reported any debts (which were below its savings, and therefore not threatening) (see Table 13).

Table 13 Savings and debts at selected facilities, 2008/9

	Savings	Debts
Seti ZH	1,317,257	
Lumbini ZH	4,593,000	2,262,000
Jumla DH	866,642	
Udaypur DH	1,950,329	
Sarlahi DH	1,394,275	
Team Hospital	2,337,099	
Chormara PHC	801,656	
Lalibandi PHC	158,791	
Dullu PHC	4,929	
Navdurga HP	188,188	

Support from the Government is described as constant by KI – mainly funding the Aama programme, the payments for free care, and for salaries. Other local sources of income include, in some cases, rent from medical stores and canteens, and small charges to clients for lab tests, some small procedures and for use of ambulances. If drugs run out or are not covered under the free care programme, then clients pay for those or bring them. Some VDCs provide support for ANM salaries, or one-off grants.

While most user fees have been abolished, some facilities continue to levy charges for tests and (less commonly) registration. The majority report no income from user fees now.

KI report increases in recurrent expenditures in the recent period, which are linked to the increase in volume of services for both deliveries and general care (some also mention price hikes for medicines). As Aama and free care came in at around the same period, respondents were not able to disentangle their effects.

The impression from KI is of facilities which are struggling financially, although the Aama programme itself is a help, rather than a problem. The wider problem is dwindling income sources and increasing burdens of staff and other costs which have to be met. The Aama programme may to some extent be cross-subsidizing some of the other services (particularly the free care).

'We could not be able to meet overall costs of HP without Aama programme' (Navdurga HP)

On the other hand, most of the facilities at district level and below were in receipt of free drugs from the general free care programme, which to some extent cover some of the delivery drug and supply needs (e.g. Gentamycin, Oxytocin, Magnesium Sulphate, minor antibiotics, gloves, and cotton). Most complained that the quantities are not adequate, however, in which case they supplement locally. Given that the Aama reimbursements are meant to cover all drug inputs, these 'free drugs' represent an additional subsidy.

6 Management of Aama funds

6.1 How Aama funds are used

Informants reported that the budget is managed for the institution as a whole, and that there is no separate account for the Aama programme, although that appears to have changed recently in some cases, with a separate account being established for Aama funds.

The management of the funds follows general lines: in larger facilities, the accountant or administrator manages them under the supervision of the Medical Superintendant. Hospitals tend to have internal management boards, though these are not always active. For smaller facilities, the in-charge is responsible, reporting to the HFMC. These again are sometimes described as being inactive. The DHO provides some supervision. Several KI complain that they, as technical staff, have to keep administrative and financial records, which they are not equipped to do.

Only one facility (Jumla DH) described having a free care committee, to decide on the allocation of funds.

In most cases, the Aama funds are not earmarked but are used for general facility expenditures, including paying for drugs, supplies, salaries, incentive payments, minor maintenance, stationery, fuel and utilities. Some facilities also report using some for investments, such as building houses, planting trees and (in the case of one HP) installing a solar panel and telephone set for emergencies and night deliveries. The flexible use of Aama resources is commented on by a number of KI.

6.2 Administrative workload

Reports on the administrative impact of the Aama programme are mixed. Some complain of the additional form-filling, but most are happy, given the added resources it brings and the benefits to the community.

*'No problem for using HP fund for reasonable need…Increased paper work but we are committed because we are earning fund for institution' (*Navdurga HP)

Others express a desire for more orientation on the administrative and financial procedures.

*'We were not aware about overall financial procedure. While government announced the Aama programme, it has to be oriented' (*Sasapur HP)

6.3 Reporting

Reports on Aama activities (annexes 3, 5, 6 and 10) are submitted each month by most facilities. Once these are verified (usually by the PHN or VDC0), the funds are released. One facility (Beltar PHC) reports a delay in submitting its reports and so a delay in receiving releases. One facility (Depelgaun HP) sent reports in once they had completed a certain number of deliveries.

Financial (expenditure) reports are more irregular – one facility said that it submitted these annually to the HFMC.

7 Impact on staff

7.1 Workload

Most of the facilities complained that the workload (both in terms of service delivery and on the administrative side) has increased.

In many places, especially in the regional and zonal hospitals, staff members complained that the government had launched the Aama programme without adequate preparation, creating pressure on them in relation to limited bed capacity, number of human resources, equipment and logistics.

7.2 Staffing and organisation of services

However, one of the main positive impacts of the Aama programme, according to KI, was an increased ability to hire and reward staff (medical and support staff). This has improved overall morale in many cases.

'We are now become confident to hire local staffs – if we able to increase number of delivery we will get more institutional costs' (Dailekh DH)

'We are using Aama fund to hire support staff which are being very useful to support our nursing staffs at night' (Dullu PHC)

'The major change is confidence among nurses, doctors, accountants and manager' (Seti DH)

In the Maternity Hospital they have added 12 examination beds for ANC. Due to the increased case load, the time given for each patient has also had to be reduced. Each case is now prioritized. The number of beds in inpatients also needs to be increased to meet the growing numbers. The Maternity Hospital thought the government had announced the scheme without sufficient preparation. To meet the increasing load, some additional peons, staff nurses, doctors and medical officers have been contracted.

In Koshi Zonal nursing staff were working 1-2 hour extra per day to manage the case load.

In Pokhara volunteers and interns have been added. They had also cut down the retention time of clients: they were discharging normal delivery clients in 12 hrs and for CS cases the clients were discharged in 4 days instead of 7 days, as had been done before. Because of HR shortages they were not been able to use the existing operation theatre for CS in the gynecology ward.

Team Hospital (Mission) in Dadeldhura District had increased the number of nursing staff and divided the staffs into 3 shifts to render a 24-hour service. Before the programme the staff were basically on call system for 24 hours a day. The number of complicated cases, especially vacuum deliveries, were increasing, mainly due to referral by all the facilities around, including the Dadeldhura District hospital.

In Jogbudha DH to manage the increasing institutional delivery they have added delivery sets, increased the number of beds and added support.

In Sarlahi District Hospital they were aiming to improve the infrastructure and make provision of an additional ward for post-delivery care, to cope with the increasing load.

In Dailekh the facility was referring all the CS cases to Surkhet. To meet the increasing load of normal and complicated cases they had hired 2 ANMs.

Nawalparasi District Hospital has been provided one ANM by the DDC and 2 ANMs hired by the HFMC to assist with the high volume of deliveries. They have also reduced the length of stay to 6 hours for normal delivery. CS cases are being referred to Butwal because the doctor who was operating at the hospital earlier has recently been transferred to the PHCC (where CS service is not available).

In Rampur Health Post the facility was coping with the increased workload with support from the Village Development Committee (VDC). The VDC had hired an ANM to support a 24-hour delivery service. The HP management committee hired a sweeper to support in the delivery room.

Results from the monitoring forms, looking at the number of posts related to delivery services in each facility, found that for all facilities where more than one year's data was available, the number of posts has been increasing (see Table 14 and Table 15). This suggests that the ability to attract and

motivate staff working in delivery services has not been negatively impacted by the changes in policy, including Aama.

In some cases, like the Maternity Hospital, the increase in 2009 appears to be dramatic, but may be due in large part to non-reporting of support staff in previous years.

Comparing facilities of the same kind, some appear to be better staffed overall than others. Jumla DH, for example, reports a much smaller quota of staff than other DH in our sample. Team hospital is relatively highly staffed, with 25 staff (compared to 5-9 staff in the other DHs). Similarly, at PHCC level, total reported staff ranges from 2-12. At HP level, most have 3 members of staff, but Sasapur HP reports 8.

Looking at the number of staff present on the day of the visit by the research team, the overall presence (for those facilities where checks were made) was just under 70% of reported posts. It is hard to draw firm conclusions from this though, as some of the absences will have been on official duties outside the post. However, attendance at lower level facilities appears to be better than at higher level facilities, perhaps because of their higher staffing levels or lack of alternative employment options.

Table 14 Staff posts related to deliveries in hospitals, 2007-9

Maternity hospital

Staff	2007	2008	2009
ANMs	25	25	25
Staff nurse	140	164	179
Doctor		78	78
Obs/gynae			
Anaesthetists		5	5
Support staff involved in delivery care			251
Paramedical			37
Total	165	272	575

RH

Staff	2007	2008	2009	Present
ANMs	1	1	1	1
Staff nurse	10	10	12	3
Doctor	4	4	4	2
Obs/gynae	1	1	1	1
Anaesthetists				
Support staff involved in delivery care	5	6	6	3
Paramedical				
Total	21	22	24	10

Koshi ZH

Staff	2007	2008	2009	Present
ANMs				3
Staff nurse	18	19	19	5
Doctor	7	7	7	1
Obs/gynae	1	1	1	1
MGPS	0	0	0	
Anaesthetists	1	1	1	
Support staff involved in delivery care	8	8	8	3
Total	35	36	36	13

Lumbini ZH

Staff	2007	2008	2009
ANMs	7	8	10
Staff nurse	7	7	7
Doctor			31
Obs/gynae			4
MGPS			-
Anaesthetists			2
Support staff involved in delivery care			
Total	14	15	54

Jumla DH

Staff	2007	2008	2009	Present
ANMs				
Staff nurse	1	2	2	2
Doctor	1	1	1	1
MGPS	1	1	0	
Support staff involved in delivery care				2
Total	3	4	3	5

Udaypur DH

Staff	2007	2008	2009	Present
ANMs			5	1
Staff nurse			2	2
Doctor			3	3
MGPS			-	
Support staff involved in delivery care			3	3
Total	-	-	13	9

Sarlahi DH

Staffs	2007	2008	2009	Present
ANMs	2	2	2	2
Staff nurse	3	3	3	2
Doctor	4	4	4	2
Obs/gynae	-	-	-	-
MGPS	-	-	-	-
Anaesthetists	-	-	-	-
Support staff involved in delivery care	10	10	10	3
Total	19	19	19	9

Team DH

Staff	2007	2008	2009	Present
ANMs			2	6
Staff nurse			2	7
Doctor			-	3
Obs/gynae			-	1
MGPS			2	2
Anaesthetists			2	2
Support staff involved in delivery care			3	4
Total	-	-	11	25

Table 15 Staff posts related to deliveries in PHCCs and HPs, 2007-9

Jogbudha PHC				
Staff	2007	2008	2009	Present
ANMs			3	3
Support staff involved in delivery care			4	3
CMA			4	3
HA			1	
Total			12	9

Kalikakhetu PHC				
Staff	2007	2008	2009	Present
ANMs		1	1	1
Support staff involved in delivery care			1	1
Total	-	1	2	2

Beltar PHC				
Staff	2007	2008	2009	Present
ANMs	2	3	3	1
Staff nurse				
Doctor		1	2	
Support staff involved in delivery care				3
Total	2	4	5	4

Lalibani PHC				
Staff	2007	2008	2009	Present
ANMs	3	3	3	3
Staff nurse	1	1	1	1
Doctor	1	1	1	0
Support staff involved in delivery care	5	5	5	4
Total	10	10	10	8

Depalgau HP				
Staff	2007	2008	2009	Present
ANMs		1	1	1
Support staff involved in delivery care	1	1	1	1
VHW				1
HA	1	1	1	
Total	2	3	3	3

Rampur HP				
Staff	2007	2008	2009	Present
ANMs	1	1	2	1
Support staff involved in delivery care	1	1	1	1
Total	2	2	3	2

Sasapur HP				
Staff	2007	2008	2009	Present
ANMs	1	2	2	1
Support staff involved in delivery care	2	2	3	1
Paramedics	3	3	3	2
Total	6	7	8	4

Navdurga HP				
Staff	2007	2008	2009	Present
ANMs	1	2	2	1
Support staff involved in delivery care		1	1	1
Total	1	3	3	2

7.3 Motivation of staff

In general the staff in all the facilities felt that the Aama programme had made the work much easier now in terms of efficient supply of drugs and supplies: the service is swift since they do not have to worry about the charge to the client in any way. Supplies are readily available in the hospital and they no longer have to write prescriptions and wait until the clients bring in the required drugs and supplies. Due to this, clients have been receiving immediate service. All the facilities reported that they do not have problems with supply of drugs or supplies. One of the health workers from a remote low-HDI district expressed his feelings as below:

"Having hard cash with women is an important factor for women in rural areas – we are handing out NRs. 1,000 and providing free care – this is a programme of poor women and they love it"

The majority of staff reported that they were now more motivated to provide services since they can provide them without any discrimination and without worrying about the patients' capacity to pay the bills at the end. They felt that service was being provided more equitably at present. In all cases supplies were being obtained from the facility store. Many said that due to this and the incentive their motivation to work was high. In some cases, there were not enough staff and workloads had increased, forcing them to devote less time to each patient, but still they were not unhappy but

recommended that proper staff should be added. It seemed in almost all the facilities the commitment of service provicers towards their clients was increasing. The staff were also happy because now many of the staff nurses and ANMs were receiving SBA training, improving their capacity to provide a better quality service and able to practice their skills on the increased institutional deliveries. This, together with incentives, was motivating them more.

Some resentment was however expressed in a few places where the distribution of incentives was not shared outside the delivery team.

In a few places, especially lower level facilities in remote areas, where workload was high and staff were limited, the staff felt that they could be more motivated if, in addition to the incentive, a complete team for the delivery was available.

In the central level at the Maternity Hospital it was reported that the attendance of staff has improved because after Aama programme they have introduced a rule that any staff who is on leave for more than two weeks does not get a share of the incentive.

The Aama programme has also contributed to more active HFMCs in some cases.

*'Aama programming is contributing to activate HFMC. New we are having regular meetings and members are actively participating in the meetings' (*Seti DH)

KI reported increased client satisfaction and better relationships with the communities. In particular, some comment on the increase in utilization by particular groups, such as Dalit. Some however express concern that the expectation of free care is now becoming widespread, and that even households which can afford care are benefiting.

7.4 Use of incentive payments

Incentive payments to staff of NRs 200-300 per delivery were laid out in the Aama policy. From interviews, it appears that this amount has been paid in most, but not all, facilities. Team Hospital, for example (a community hospital), reports that it is not yet paying the incentives, although they are under discussion. Jumla DH, on the other hand, is spending over the limit, with NRs 500 of the Aama payment being distributed to staff (and Sasapur HP distributes NRs 700-800 in incentives per delivery).

The distribution of incentive payments also varies across facilities. A number of facilities pay the full incentive payment to the nurses. One ZH reports paying NRs 300 to nurses and 100 to doctors. Another facility, a HP, provides NRs 100 to the 'service provider', NRs 100 to the TBA for assisting, NRs 50 to FCHVs for accompanying women, and some small amounts to the support staff (peons). Joshi ZH pays 15% to the doctor, 68% to the nurse, 12% to other staff, and 5% to support staff, including the accountant.

Two facilities, instead of paying incentives, have used the Aama funds to pay for salaries of additional support staff.

Some facilities used to give staff a payment from user fees prior to Aama (e.g. Beltar PHC paid NRs 100 to the nursing staff per delivery, while Lalbandi PHC and Sasapur HP paid staff NRs 350, and NRs 60 to the HFMC). The incentives replace (and in many cases augment) those payments.

Some KI comment on the pressure from staff to increase incentive payments and call for clearer guidance on this issue, rather than leaving it to individual HFMCs.

8 Overall impression of Aama and recommendations for its future by KI

A summary of perceived positive and negative impacts of the Aama programme is given in Table 16. It is clear that the positive outweigh the negative. The positive are also more concrete – these are things that have been observed by KI, while the negatives tend to be fears of what *might* happen, or observations about constraints.

Table 16 Summary of KI comments on positive and negative impacts of Aama and recommendations

Reported positive effects	**Reported negative effects**
• Able to serve more clients • Reduced delays in accessing services • Not having to worry about whether patients can pay • Better trust between the community and staff • Increased efficiency as staff do not have to wait for patients to secure funds and drugs • Increased facility revenues • Strengthened 24-hour service • Increased employment for local women in support roles • Improved infrastructure • Enhancing the skill of staff through increased practice • Increased equity • Contributed to strengthening the financial, reporting and management system • Increased awareness in communities • Improved women's rights	• May encourage people to have more children • Increased workload with limited staff may lead to demotivation • Lack of physical space and equipment to deal with increased workload (may lead to lower quality of care) • Have to send women home more quickly • Some rich people who used to pay for cabins now move to the general wards **Constraints:** • Lack of administrative staff • Delay in funds • Need for more awareness raising in communities
Recommendations	
Overall: ▪ The policy should continue in future *Management issues:* ▪ Guidelines for Aama should be more specific ▪ Ensure sustainability of the programme by improving local and central coordination ▪ Effective monitoring – need to look how the amount is being expended ▪ Need to release the drug by establishing central supply system ▪ Focal person needs to be identified at district and central level	

- Provision of admin/finance assistance
- Financial orientation (record keeping) to the technical staff
- Timely auditing and feedback to hospital

To improve the quality of service:
- Increase number of health staffs and provide them training
- Improve physical infrastructure
- Increase the number of beds
- Use the fund received for Aama to improve the delivery service
- If we cannot increase number of providers in delivery ward, we have to agree on the minimum/maximum workload
- Enhancement of SBA skills

Incentives:
- Staff incentive must be increased and reflected in the guidelines
- There needs to be a provision of getting incentive regularly
- NRs 300 incentive should be tax-free
- Encourage FCHVs to refer cases to HF by providing incentive to them

Financing and content of policy:
- Increase the unit cost: there is no surplus in the HFMC account
- Neonatal case should be included in the package

Awareness:
- Increase awareness of the Aama programme in rural communities

Source: KI interviews

The recommendations of KI cover a wide range of issues, all framed within a desire for the policy to continue. None of the KI recommended that it should be stopped or even redesigned in any major way. The majority of recommendations covered enhancements (improved management and other investments to increase quality of care), as well as a predictable focus on increasing the incentives for staff.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the Aama policy appears to be operating with reasonable effectiveness, as seen from the facility perspective. Funds are arriving without large delays and in predictable amounts. The funds which are received are appropriate to the costs which facilities incur and to the income which they have lost. They allow for some overhead costs and improvements, if managed well. Managers appreciate the flexibility which they offer and see the policy as supportive of their work, on the whole. Most staff have benefited from some additional small incentives and an improved working relationship with their clients, although there remain concerns about staffing levels in some areas.

The main concern relates to on-going charges to patients in some facilities. These undermine the policy and should not be necessary – all of these costs are covered by the reimbursement tariffs. It is possible that these reflect opportunism by staff or that they are a safety valve for a wider problem that many of the financing sources for the facilities have recently been eroded (and inadequately replaced, possibly, in the case of free care). The deficits at national and zonal hospital level do raise concerns about overall financial sustainability (or wider financial management issues).

The main concerns which should be addressed arising from this study are the following:

- While the monthly activity reports are well filled in, financial data is less systematic and this makes it hard to track the Aama (as well as general revenues and expenditure). Key informants called for more financial orientation in how to manage the programme, and this is supported by the findings.

- There should be a renewed clear communication to staff and communities on what is (and is not) covered by the free delivery policy. A system of sanctions for facilities which continue to charge might be considered if the problem persists. This will only be effective however if facilities are funded for all of their services, including the wider curative care provided.

- HFMCs face considerable pressure to divert resources from Aama to staff, which are therefore not available for investment in the facility. A guideline with maximum limits for incentives (and suggestions on how to share them) should be clearly communicated to all managers and staff. Again, incentives should be conditional on not asking for informal payments from clients.

- With its fixed payment per case, the policy does introduce the risk of cost-cutting or cutting corners in care of patients – a risk which should be controlled by building in more quality of care indicators into the monitoring system.

- There is a case for offering higher payments to facilities which are based in remote areas, and therefore face higher input costs as well as lower overall utilization (and therefore reduced revenue). This should be considered when there is next a review of tariffs – just as women in the mountains receive higher transport subsidies, so too the facility payments could be varied by ecological zone.

Annex A Tools

A.1 Key informant questions

MONITORING OF FINANCIAL IMPACT ON FACILITY OF THE AAMA PROGRAMME

Semi-structured interviews with district and facility stakeholders

FHD/SSMP
November-December 2009

Introduction

Namaste! My name is…….. I work for the Supporting Safe Motherhood Programme (SSMP) based in Kathmandu.

Purpose of the Study

We are here to carryout an independent assessment of the Aama Surakshya Karyakram on behalf of SSMP under DoHS/MoHP/FHD. As a part of the assessment, we will be talking to you and other officials/program managers in this district to understand the functioning of the program and how the strategies being adopted to encourage women for institutional deliveries can be further scaled up. Your views on the scheme and whatever information you provide us will contribute significantly in identifying issues that need resolving to improve the performance of the program and provide recommendations to the government on improved practice.

Talking to you on these topics may take about 45 minutes. If there is anything that is unclear or you need further information, I can help you to contact SSMP Advisor – Dr Suresh Tiwari (Phone 9851104178).

Can I begin with the discussion now?

A. Background

1. District:…….
2. Name of the Institution : ……..
3. Type of facility ownership (if relevant): public, private, mission?.....
4. Respondent's Name : ……..
5. Designation: ……
6. Duration of posting in the present institution …….
7. Interviewer's name: ……..

Changes to activities

How has the Aama free delivery programme affected the number of women coming in to deliver in your facility?

Has it changed the way you organize the services?

- Any increase in particular types of deliveries? Why?
- How did you respond to that?

How has it affected the quality of care that you provide?

- Availability of drugs and supplies
- Motivation of staff

Financial impacts

Revenues:

How do the reimbursements under the Aama programme compare with fees that you used to get from users?

Are you receiving free drugs under the free health care component?

- What kinds?
- How often?
- Are they adequate?

How have your other sources of funds changed recently?

- Government subsidies
    - how much do you get?
    - how is it calculated?
    - (For larger facilities) Is the budget managed for the whole facility or does each department keep its own funds? If so, do some departments pay some part of their revenue to others? How is this done?
- Local sources
- Changes to user fees (e.g. from new free care policy)

Expenditures:

What do you use the Aama funds for?

Do you have enough to pay for drugs and supplies?

Have there been any changes to your overall expenditure over the past year?

Fund management:

How are the Aama funds managed?
- Who manages them?
- Who supervises the manager?
- Are there any problems related to fund management?

How easy is it to use them for the facility's needs?
- Administrative issues, accessing funds, need for paperwork etc.
- How much flexibility do they have to spend the funds?
- How often do they report on the funds? Do they get their reports in on time? If not, why not?

Delays:

Do the payments come on time?
- If not, how long and often are the delays?
- What is the cause of the delay?
- What is the impact of the delay?

What stages are required to access them?

Adequacy of funds to meet delivery needs:

Do you receive the right amounts, as per the tariffs?
- If not, why not?
- How much difference is there?

Are there every shortfalls? What happens in this case?

Are the amounts enough to cover your delivery costs?
- If not, how much gap is there? For which types of deliveries, and cost items?
- What is the impact of the shortfall, if any?

Overall financial situation:

How is your facility coping overall financially?
- Leaving aside the Aama programme, are you able to meet your overall costs?
- If not, why not?
- What are your main challenges in general?

Impact on staff:

Do you use the Aama funds to benefit health and other staff? How?

- Describe how much is paid and to whom
- What kinds of staff benefit?
- What money did they used to get from the user fees?

What has been the impact of the programme on staff?

- Impact on their workload
- Impact on their pay and motivation
- Impact on their relationship with clients
    - Do they resent that the women get free care?
    - Are they happy that they don't have to ask for money
    - Do they feel it is easier to do their job now, or harder?
- What about home deliveries by health staff?
    - Have they increased or decreased?
    - Are they financially affected by any changes to home delivery numbers this year? How?

Has it made it easier or harder to recruit and keep trained staff?

- Have they had an increase in staff overall in the past year, or a decrease?
- Why?
- What is the most important factor for keeping trained staff in post?

Impact on clients:

What exactly is the package of care that you offer for free to clients?

- ANC, deliveries, PNC?
- What costs are covered? Do they contribute for any of the following items?

Type of payment /service	**Do women need to pay or purchase partially or fully?**	**Is so how much it costs?**	**Why?**
Registration fee			
Admission fee			
Consumable supplies (pads, gloves, syringes)			
Essential medicines			
Blood transfusion			
Lab tests			
Incentives to helper for cleaning			
Incentives to provider for assisting delivery			
Any other informal payment required	*xxxxx*		

What impact has the Aama programme had on clients?

- Any positive or negative feedback
- Any change to type of women who come to deliver in the facilities

What do clients now pay for?

- Transport
- Registration
- Consultation
- Tests
- Drugs
- Bed costs
- Food
- Gifts for staff
- Anything else?

Overall assessment of programme

What have been the positive effects of the Aama programme in your area/facilty?

What have been its negative effects?

How do you recommend that it can be strengthened in future?

A.2 Financial monitoring information

Information from national level

The main source of information at the national level is (1) the Aama forms, with (2) the HMIS as a secondary triangulation point for some indicators (the activity ones). The following information will be collected:

Activities (Aama forms, HMIS, CBS)

- Facility delivery numbers (normal, complicated, CS), for one year before and the period after Aama, nationally and for the six focal districts
- Population numbers for 2008 and 2009, nationally and for the six focal districts

Revenues (Aama forms)

- Reimbursements to facilities under Aama
- Delivery numbers and types

This will be looked at nationally, and also for the six focal districts. This data is clearly all from the period after Jan 2009

Delays (FCGO)

- Amounts and timing of payments made to six districts from national level, since Jan 2009, for facility reimbursement component
- Timing of receipt of reports from the six districts

The steps involved in disbursing funds at the national level will be described, with an indication of the timing gaps that have occurred in relation to these districts in this past year.

Information from districts

Activities (PHO, DHO statistical office)

- Delivery numbers and types, for whole district and for selected 3 facilities, by month, one year before and 9 months after
- Population number, 2008 and 2009, for district, and for selected three facility catchment areas (if possible)

Revenues (DHO Accountant/PHN)

- Claims received for facility reimbursement for the whole district (number, type of delivery, total claim presented), amounts and dates
- Claims for the 3 facilities (number, type of delivery, total claim presented), amounts and dates
- Amounts paid out and dates of payment for the reimbursements (district and selected facilities)

Expenditures (DH0/LMD)

- Amounts of drugs for delivery care or value of money sent to facilities to purchase delivery-related drugs under Free Care programme in 2009 (amounts, sums, dates sent, for the 3 selected facilities)

- Amounts, values, dates of any other delivery equipment which was provided free to the 3 facilities in 2009

Delays (district finance office)
- Amounts received by district from Aama programme for facility reimbursement in 2009 (total amounts and dates received)
- Amounts sent to facilities for Aama facility reimbursement, and when
- Date of receipt of Aama reports from 3 facilities
- Date of onward Aama reports sent to national level

Adequacy (DHO)
- Claims received for Aama facility reimbursement from whole district and specifically for three facilities (amounts and timing)
- Amounts paid in reimbursement for the whole district and specifically the three districts (amounts and timing)

Information from facilities

Activities (Aama forms 3, 4 and 5; maternity registers)
- Delivery numbers and types, for 2008 and 2009, by month, by the three categories of ND, complications (managed or referred up), CS (managed or referred up)
- Location of women delivering (from maternity registers)

The objective of collecting location is to calculate coverage for the area. For a smallest facility (PHCC and HP), this could be done for the whole period. For larger ones (DH), it could involved taking a snapshot from 3-4 months in 2008, compared to the same 3-4 months in 2009, looking at the number of women delivering in-catchment compared to the estimated catchment population and expected delivery numbers. For the largest (RH and ZH), analysis of 1-2 months would be adequate.

Revenues (facility in-charge; accountant; accounts books; annual financial reports)

User fees before:
- Official tariffs for user payments for deliveries before Aama (by category of delivery, or as broken down by the facility), including ANC and PNC (if applicable)
- User fee revenues per delivery in 2008, for ND, complications, CS (see below)
- User fee payments for ANC and PNC, if applicable, before Aama

Using the same sampling principle as above (i.e. examining the account book for longer periods in facilities with fewer deliveries, compared to larger ones), we would collect information on the charges actually paid by patients having deliveries, including the following types of costs:
- Registration
- Admission
- Drugs
- Tests
- Blood
- Other supplies
- Bed-charge
- Cleaning

- Anesthesia
- Food
- Payments to staff from clients

Aama reimbursement:

- Reimbursement of deliveries from Aama programme in 2009: amounts, timing, any internal breakdown by category of delivery

Total revenues for facility: (collect for 2007, 2008, 2009, if possible)

- Annual grant from government
- Total user fees (all services)
- Donations
- Training fees
- Rent of properties
- Any other income?

Total expenditure for facility: (collect for 2007, 2008, 2009, if possible)

- Salaries paid by facility
- Maintenance
- Drugs and supplies
- Utilities
- Other consumables
- Any other expenditures?

Balance:

- Any debts or savings recorded at the end of the month or financial year

Expenditures (facility in-charge; accountant; accounts books; annual financial reports)

- Use of Aama facility funds in 2009
  - How much for drugs?
  - How much for staff? (by category, if available)
  - What other costs covered?
- Payments to staff from delivery user fees in 2008 (how much? How often? To whom?)
- Delivery drugs received from free care programme (drug type; volume or value (if in cash); date received)

Delays

- Date of reports submitted to district for Aama programme

Impact on staff

- Filled posts for staff directly involved in deliveries, in 2007, 2008 and 2009 (if possible)
  - ANMs
  - Staff nurse
  - Doctor
  - Obs/gynae
  - MGPS
  - Anaesthetists
  - Support staff involved in delivery care
  - Any other?
- Who is present at the time of visit? (spot check on availability of staff who are in filled posts)

A.3 Notes for costing

For the costing, we take a narrow facility perspective. We are therefore only interested in the portion of costs which the facilities have to fund from fees or reimbursement – i.e. excluding costs which are centrally funded, such as capital investment and salaries. These costs will include the following:

Direct costs

- Drugs used for deliveries
- Tests used for deliveries
- Payments to staff for deliveries
- Supplies that are consumed for delivery services
- Stationery costs for delivery care
- etc

These costs are calculated based on the actual consumption per normal delivery, complicated delivery and caesarean (as applicable in the facility). These can be calculated as an average, based on recorded usage in registers for a given time period, such as a month, multiplied by the cost which facilities pay. Interviews with clinical staff and accountants will be needed to ascertain the real inputs that are used to deliver these services.

Indirect/overhead costs

- Utilities
- Support staff time
- Facility maintenance
- Cleaning
- etc

These costs will be ascertained through interviews with managers and accountants. Any central or district subsidies for running costs should be recorded and subtracted. The net costs will then be allocated to deliveries in proportion to their weight in the total caseload. Based on previous studies[3], a weighting of four OPD per one delivery can be used to balance the resource demands of these different services.

Capital costs

Any equipment which is purchased by the facility (i.e. not donated or funded centrally) during the year will be annualized and added to the delivery cost. If it is used exclusively for deliveries, the cost will be divided by delivery numbers in that year. If it is shared amongst different services, it will be first apportioned based on the same calculation as above.

Analysis of results

The results of the costing will be an average cost per normal delivery, complicated delivery and caesarean section for each type of facility, which can be compared with the current reimbursements

[3] 'Proposed revisions of the SDIP – strengthening a major national initiative for safe motherhood in Nepal', Tim Ensor & Sophie Witter for DFID & FHD, December 2008

and also the user fees which were charged prior to the Aama policy. The caseload per facility type will also be carefully noted along side the results, as this has a substantial impact on the final cost per case.

For complicated deliveries, there will be separate analysis of the cost per main complication types, as well as an average across all complications